



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,972	01/20/2004	Lewis R. Dove	10020702-1	4019

7590 11/01/2005  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

EXAMINER

LEE, BENNY T

ART UNIT PAPER NUMBER

2817

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,972

Applicant(s)

DOVE ET AL.

Examiner

Benny Lee

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5, 8, 12; 13, 17 is/are rejected.  
7) ☒ Claim(s) 4, 6, 7, 9-11; 14-16, 18-20 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

The disclosure is objected to because of the following informalities: Page 4, paragraph [0015], note that is shielded 106, 108, appears to be an incomplete recitation. Applicants' comments have been noted. The examiner finds applicants' alternative language much more suitable, and suggests that an amendment incorporating such language be made in applicants' next response. Pages 6, 7, 8, paragraphs [0022] and [0024], note that --by step-- should precede (402, 404, 408, 410, 412, 414, 416, 702, 704, 706, 710, 712, 714, 716), respectively. Applicants' comments regarding this issue has been noted, but found to be unpersuasive. It should be noted that each of the above labeled blocks (i.e. 402, 404, ..., etc) are indeed --steps-- in the flow diagram depicted in "Figs. 4, 7" and thus such terminology is deemed appropriate. Appropriate correction is required.

The disclosure is objected to because of the following informalities: Note that the following reference labels need description relative to the corresponding drawing figure: Figs. 5, 6 (200, 204, 224); Fig. 6 (202, 218, 220); Figs. 8, 9) (218, 224); Fig. 9 (200, 202, 204, 800, 802, 810, 812, 904, 906). Applicants' comments regarding this issue has been noted, and it is suggested that to avoid duplicative description, applicants' should provide a statement indicating that like reference numbers in different drawing figures refer to the same element/feature and may not be described in detail for all drawing figures. Appropriate correction is required.

The drawings are objected to because of the following: In Figs. 5, 6, for the right side transmission line should a reference label --220-- be added to the left side of that shield?. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one

Art Unit: 2817

figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by either Leeb or Matsubayashi et al (both of record).

Note that each reference discloses first and second dielectric mounds (1, 5 in Leeb; 10a, 10c in Matsubayashi et al) encapsulating first and second signal conductors (2 in Leeb; 3 in Matsubayashi et al). A third dielectric mound (1, 5 in Fig. 10 of Leeb; 10b in Matsubayashi et al) which encapsulates a signal conductor (3 in Matsubayashi et al, 2 in fig. 10, of Leeb) and which is disposed in a “valley” adjacent to the first and second dielectric mounds. A first ground

Art Unit: 2817

plane (2 in Matsubayashi et al; 6 in Leeb) and a second ground plane (8 in Leeb; 4, 6 in Matsubayashi et al) is disposed about each of the first, second and third dielectrics.

Claims 8, 12; 13, 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Leeb (of record).

Note that in Leeb, each of the first, second and third dielectric mounds comprise upper and lower dielectric mounds (1, 5) which, being deposited one on top of the other in a laminated manner, inherently characterizes a thick film construction.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leeb or Matsubayashi et al in view of Dove et al ('979), all of record.

Each primary reference dissos the claimed invention except for the dielectric mounds being comprised of KQ dielectric material.

Dove et al discloses that the use of KQ dielectrics especially in shielded coaxial multi-layer structures is conventional in the art.

Accordingly, in view of the recognized teaching in Dove et al, it would have been obvious to have modified the dielectric mounds of either primary reference to have been KQ dielectric material, especially in view of their conventional use in shielded coaxial multi-layer structures such as in either primary reference.

Applicant's arguments filed 15 August 2005 have been fully considered but they are not persuasive.

Applicants' have argued that neither of the prior art to Leeb or Matsubayashi et al disclose "filling a valley between the first and second mounds of dielectric". In particular, it is argued that since Leeb and Matsubayashi et al form their dielectric mounds in parallel, then "it is questionable whether Leeb or Matsubayashi really disclose forming a third dielectric mound in "a valley between" first and second dielectric mounds, as such a valley is never really created" Moreover, it has been argued that Leeb does not appear to disclose the particular construction method of claims 8, 13. Finally, with respect to the combination with Dove et al, it has been argued that dove et al does not make up for the deficiencies in either Leeb or Matsubayashi et al.

Contrary to applicants' assertion, it should be noted that the space between the sloping walls of the shielded transmission lines in either Leeb or Matsubayashi et al would indeed constitute a "valley". Consider that if the space between the sloping walls of the shielded transmission lines were left empty, such space would indeed have been considered a "valley" (i.e. a hollow space surrounded by opposing walls). Accordingly, any structure (e.g. another

Art Unit: 2817

“shielded transmission line”, etc) disposed in such a space would obviously have been considered to have been “filling” the “valley” and thus would have met this claim recitation.

Regarding claims 8, 13, it should be noted that the method recited use generic method steps (e.g. depositing, etc) and as such are met by the laminating method disclosed by Leeb. In other words, when layers are laminated together, they are “deposited” on top of each other.

As for the combination with Dove et al, it should be noted that such a combination is merely being relied on to establish the obviousness of the KQ dielectric, to which applicants’ have not argued the obviousness thereof. Accordingly, it appears that the patentability of these claims would generally rise or fall with the patentability of the respective independent claim from which they depend.

Claims 4, 6, 7, 9-11; 14-16, 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

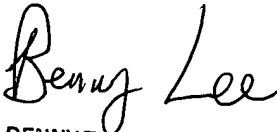
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2817

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (571) 272-1764.

B. Lee

  
BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817